

## 9. GESAMP

**Summary of role:** *The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) is an advisory body of experts tasked to provide status of science on specific topics on marine environmental protection through a mandate granted by UN bodies. GESAMP publishes its finding in public reports. Plastics and microplastics in the marine environment have been a topic of study under GESAMP since 2012.*

**Summary of recommendations and work status:** *GESAMP has established the Working Group ‘Sources, Fate and Effects of Plastics and Microplastics in the Marine Environment’ in 2012 and produced several reports on pollution from marine debris and microplastic, in particular ‘Sources, Fate and Effects of Microplastics in the Marine Environment’ Part 1 (2015) and Part 2 (2016); and ‘Guidelines For the Monitoring and Assessment of Plastic Litter in the Ocean’ (2019).*

**Keywords/research fields:** *Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection; GESAMP; function and mandate; environmental assessments; publications; reports; studies; guidelines and workshops; working group (WG 43); GESAMP reports on plastic pollution in the marine environment; working group (WG 40): Sources, Fate and Effects of Microplastics in the Marine Environment; Guidelines For the Monitoring and Assessment of Plastic Litter in the Ocean; report: A Global Assessment*

### 9.1 Function and mandate

The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) is an advisory body, established in 1969, that advises the UN system on the scientific aspects of marine environmental protection. It is sponsored by 10 UN organisations with responsibilities relating to the marine environment (most of whom are involved in combating pollution from marine plastics). They utilise GESAMP as a mechanism for coordination and collaboration among them.

The GESAMP’s functions are to conduct and support marine environmental assessments; to undertake in-depth studies, analyses, and reviews of specific topics; and to identify emerging issues regarding the state of the marine environment. GESAMP itself today consists of 17 experts, drawn from a wide range of relevant disciplines, who act in an independent and individual capacity. See GESAMP publications: <http://www.gesamp.org/publications/the-new-gesamp-science-for-sustainable-oceans>.

This institutional research mechanism is not intergovernmental in that it is not limited to experts nominated by states. Furthermore, none of the current members are from Southeast Asia. However, GESAMP working groups call on experts around the world and each report is submitted to a peer-review process through this network. Their reports have an important credibility and legitimacy in the context of a number of intergovernmental organisations that set international law and policies that are applicable to Southeast and East Asia.

## 9.2 Reports, studies, guidelines and workshops

In 2018, the 45<sup>th</sup> session of GESAMP established a new working group (WG 43) to build a broader understanding of sea-based sources of marine litter, in particular from the shipping and fishing sectors, including the relative contribution of different sources, analysis of plastic use and management within both industries and the range and extent of impacts from sea-based sources of marine litter. The Terms of Reference of the WG was adopted in April 2019. The first meeting of WG 43 was held by teleconference on 19 June 2019 and the first workshop was held on 28–30 October 2019 in Rome, Italy. The second workshop is scheduled for mid-year 2020. See the update provided at the GESAMP 46<sup>th</sup> session in September 2019: [http://www.gesamp.org/site/assets/files/2040/46\\_4\\_6.pdf](http://www.gesamp.org/site/assets/files/2040/46_4_6.pdf).

The two concurrent workstreams of the WG 43 are:

- (i) An overarching scoping study designed to provide initial information required for IMO's Action Plan to Address Marine Litter from Ships, and help identify priorities within this overarching scope; and
- (ii) Scientific research focused on ALDFG. A first report is expected by early 2020 (<http://www.gesamp.org/work/groups/wg-43-on-sea-based-sources-of-marine-litter>).

The next annual session of GESAMP is scheduled for 7–11 September 2020 in Monaco.

Of note, GESAMP became involved in pollution from marine plastics and microplastics in the early days, when the strong wind of research first begun and worries of this 'new' pollution stream gained steam. In 2012, a Working Group named "Sources, Fate and Effects of Plastics and Microplastics in the Marine Environment" was established to deal with plastic and micro-plastic in the ocean (WG 40) with the Intergovernmental Oceanographic Commission (IOC) as the lead agency, and with additional in-kind or financial support from the IMO, UNEP, the NOAA, Plastics Europe and the American Chemistry Council.

Notable works and events undertaken by GESAMP on pollution from marine plastics include:

- An international workshop on 'Assessing the risks associated with plastics and microplastics in the marine environment', which was held on 21–23 May 2019 and hosted by the secretariat of the Basel Convention in Geneva, Switzerland.

The Workshop recommended that a global assessment of microplastics in the context of the marine litter problem as a whole be initiated under the leadership of GESAMP, and with the cooperation of UN agencies, regional and national administrations, IGOs and NGOs, in order to further advise policy-makers on many aspects of the marine plastic debris problem which are currently poorly-known and understood. The proceedings of the Workshop are available at: [https://www.marinelittersolutions.com/wp-content/uploads/2016/03/GESAMP\\_Workshop\\_on\\_Microplastics.pdf](https://www.marinelittersolutions.com/wp-content/uploads/2016/03/GESAMP_Workshop_on_Microplastics.pdf).

- Guidelines for the Monitoring and Assessment of Plastic Litter in the Ocean, 2019.

This authoritative report has already become a key reference for intergovernmental organisations as well as research projects and papers. The report provides a step-by-step approach in designing and implementing a programme of monitoring of marine plastic litter. Its recommendations are directed at assisting national authorities and regional bodies in setting programmes to establish the current status and trends of contamination of marine litter in the waters under their jurisdiction. (Available: <http://www.gesamp.org/publications/guidelines-for-the-monitoring-and-assessment-of-plastic-litter-in-the-ocean>.)

- Sources, Fate and Effects of Microplastics in the Marine Environment: A Global Assessment (Part 2), 2016.

This report updates and further assesses the source, fate and effects of microplastics in the marine environment identified in the previous report (see below) carried out by WG 40 of GESAMP. (Available: <http://www.gesamp.org/publications/microplastics-in-the-marine-environment-part-2>.)

- Sources, Fate and Effects of Microplastics in the Marine Environment: A Global Assessment (Part 1), 2015.

This report provides an improved evidence base to support policy and management decisions on measures that might be adopted to reduce the input of microplastics to the oceans. (Available: <http://www.gesamp.org/publications/reports-and-studies-no-90>.) It also makes three action-oriented recommendations:

- To identify the main sources and categories of plastics and microplastics entering the ocean;
- To utilise end-of-plastic as a valuable resource rather than a waste product; and
- To promote greater awareness of the impact of plastics and microplastics in the marine environment.